

WHAT IS CLAIMED IS:

1. A thermal water heating module of a substantially planar, -or according to its intended use- shaped, connectable heating unit, having a heat absorbing enlarged upper surface, an evenly deep water leading section and bottom air insulation, with inlets and outlets as connecting elements and for circulating water through a plurality of the modules.
2. Module according to claim 1, wherein the upper surface area, which is exposed to the solar radiation, is arranged and constructed with geometrical shapes like,- but not limited to-, hemispheres, cones, pyramids, ribs, waves, lines, dimples, sand-blasting- or any structural patterns that enlarge the surface area, so that the radiation exposed surface area is larger than a planar surface area within the same perimeter.
3. Module according to claims 1 and 2, wherein the water leading section has a substantially rectangular, spacious cross section, providing the same depth throughout the module, consisting of
 - a) one water leading section or a plurality of water channels
 - or
 - b) a plurality of channels within the section, wherein one channel contains encapsulated air, the adjacent channel the water flow.
4. Module according to claim 3, wherein the circulation path inside the water leading section is arranged and constructed with spacer- and support-elements of any shape that evenly distribute the water flow within and any weight on the surface of the module.
5. Module according to claim 1, wherein the bottom part consists of one or a plurality of spacious sections, each forming an air chamber.
5. Module according to claim 1, with at least one connecting element for connecting a plurality of modules, consisting of
 - a) Tubular shaped male to male connectors, using a hose or pipe as connecting means,
 - or
 - b) Tubular shaped male to female connectors, using snap joint pins with hooks at the male end to interconnect and lock with the female recipient.
6. Male connector according to claim 5, arranged with at least one groove in the shape of a notch, for the use of O-rings for a leak proof connection.
7. Module according to claim 1, wherein each module includes additional connecting means for alignment and to connect and interlock a plurality of modules.
8. Module according to claim 1, wherein the module is made of UV stabilized plastic polymer materials.